This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

1. (Currently Amended): In a <u>transistor</u> <del>component or</del> device containing a semiconductor or charge transport material, the improvement wherein said material comprises at least one mono-, oligo- or polymer of formula I

wherein

X is  $-CX^1=CX^2-$ ,  $-C\equiv C-$ , optionally substituted arylene, optionally substituted or heteroarylene,

 $X^1$  and  $X^2$  are independently of each other H, F, Cl or CN,

- R<sup>1</sup> R<sup>4</sup> are independently of each other H, halogen, optionally substituted alkyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl, or P-Sp-,
  - P is a polymerisable or reactive group,
  - Sp is a spacer group or a single bond, and
  - n is an integer  $\geq 1$ ,

with the proviso that, if X is unsubstituted thiophene-2,5-diyl and R<sup>1</sup> and R<sup>2</sup> are H, then at least one of R<sup>3</sup> and R<sup>4</sup> is selected from alkyl that is mono-or polysubstituted by F, Cl, Br, I or CN, cycloalkyl that is mono-or polysubstituted by F, Cl, Br, I or CN, optionally substituted aryl,

optionally substituted heteroaryl, and P-Sp-.

2. (Currently Amended): A <del>component or</del> device according to claim 1, <u>wherein</u> wherin said mono-, oligo- or polymer is selected from formulae Ia - Ic:

$$\star - \left[ \begin{array}{c} S \\ Ar \\ R^2 \end{array} \right]_n \star Ic$$

wherein R<sup>1</sup> to R<sup>4</sup> are different from H, and Ar is arylene or heteroarylene.

3. (Currently Amended): A component or device according to claim 1, wherein said mono-, oligo- or polymer is of formula I1

wherein

R<sup>5</sup> and R<sup>6</sup> are independently of each other H, halogen, B(OR<sup>7</sup>)(OR<sup>8</sup>), SnR<sup>9</sup>R<sup>10</sup>R<sup>11</sup>, straight chain, branched or cyclic alkyl with 1 to 20 C-atoms, which is unsubstituted, mono- or

polysubstituted by F, Cl, Br, I or CN, and wherein one or more non-adjacent  $CH_2$  groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR<sup>0</sup>-, -SiR<sup>0</sup>R<sup>00</sup>-, -CO-, -COO-, -OCO-, -OCO-O-, -SO<sub>2</sub>-, -S-CO-, -CO-S-, -CH=CH- or -C=C- in such a manner that O and/or S atoms are not linked directly to one another, optionally substituted aryl, optionally substituted heteroaryl or P-Sp-,

R<sup>0</sup> and R<sup>00</sup> are independently of each other H or alkyl with 1 to 12 C-atoms,

R<sup>7</sup> and R<sup>8</sup> are independently of each other H or alkyl with 1 to 12 C-atoms, or OR<sup>7</sup> and OR<sup>8</sup> together with the boron atom form a cyclic group having 2 to 10 C atoms, and

R<sup>9</sup> to R<sup>11</sup> are independently of each other H or alkyl with 1 to 12 C-atoms.

4. (Currently Amended): A <del>component or</del> device according to claim 1, wherein said mono-, oligo- or polymer is selected from formulae I1a - I1c:

$$R^{5} = \begin{bmatrix} S \\ X \end{bmatrix}_{n} R^{6}$$
 Ila

$$R^{5} \xrightarrow{S} X \xrightarrow{S} R^{6}$$
 IIb

$$R^{5} = \begin{bmatrix} S & R^{1} \\ Ar & S \end{bmatrix}_{n} R^{6}$$
I1c

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wherein

- R<sup>1</sup> R<sup>4</sup> are independently of each other H, halogen, optionally substituted alkyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl, or P-Sp-,
- R<sup>5</sup> to R<sup>6</sup> are independently of each other H, halogen, B(OR<sup>7</sup>)(OR<sup>8</sup>), SnR<sup>9</sup>R<sup>10</sup>R<sup>11</sup>, straight chain, branched or cyclic alkyl with 1 to 20 C-atoms, which is unsubstituted, mono- or polysubstituted by F, Cl, Br, I or CN, and wherein one or more non-adjacent CH<sub>2</sub> groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR<sup>0</sup>-, -SiR<sup>0</sup>R<sup>00</sup>-, -CO-, -COO-, -OCO-, -OCO-O-, -SO<sub>2</sub>-, -S-CO-, -CO-S-, -CH=CH- or -C≡C- in such a manner that O and/or S atoms are not linked directly to one another, optionally substituted aryl, optionally substituted heteroaryl or P-Sp-,
- R<sup>7</sup> and R<sup>8</sup> are independently of each other H or alkyl with 1 to 12 C-atoms, or OR<sup>7</sup> and OR<sup>8</sup> together with the boron atom form a cyclic group having 2 to 10 C atoms,

R<sup>9</sup> to R<sup>11</sup> are independently of each other H or alkyl with 1 to 12 C-atoms,

R<sup>0</sup> and R<sup>00</sup> are independently of each other H or alkyl with 1 to 12 C-atoms,

- X is  $-CX^1=CX^2$ -, -C=C-, optionally substituted arylene, <u>or</u> optionally substituted <del>or</del> heteroarylene,
- Ar is arylene or heteroarylene, and
- n is an integer  $\geq 1$ .
- 5. (Currently Amended): A component or device according to claim 1, wherein said material contains an [[a]] oligo- or polymer of formula I having a regioregularity of at least 95%.
- 6. (Currently Amended): A <del>component or</del> device according to claim 1, wherein n is an integer from 1 to 5000.
- 7. (Currently Amended): A component or device according to claim 1, wherein R<sup>1</sup> to R<sup>4</sup> are each independently selected from H, halogen, straight chain, branched or cyclic alkyl

with 1 to 20 C-atoms, which is unsubstituted, mono- or polysubstituted by F, Cl, Br, I or CN, and wherein one or more non-adjacent  $CH_2$  groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR<sup>0</sup>-, -SiR<sup>0</sup>R<sup>00</sup>-, -CO-, -CO-, -COO-, -OCO-, -SO<sub>2</sub>-, -S-CO-, -CO-S-, -CH=CH- or -C $\equiv$ C- in such a manner that O and/or S atoms are not linked directly to one another, optionally substituted aryl, optionally substituted heteroaryl and P-Sp-, and R<sup>0</sup> are independently of each other H or alkyl with 1 to 12 C-atoms.

- 8. (Currently Amended): A component or device according to claim 1, wherein  $R^1$  to  $R^4$  are each independently selected from  $C_1$ - $C_{20}$ -alkyl that is optionally substituted with one or more fluorine atoms,  $C_1$ - $C_{20}$ -alkenyl,  $C_1$ - $C_{20}$ -alkynyl,  $C_1$ - $C_{20}$ -alkoxy,  $C_1$ - $C_{20}$ -thioalkyl,  $C_1$ - $C_{20}$ -silyl,  $C_1$ - $C_{20}$ -ester,  $C_1$ - $C_{20}$ -amino,  $C_1$ - $C_{20}$ -fluoroalkyl,  $(CH_2CH_2O)_m$  with m being an integer from 1 to 6, optionally substituted aryl, optionally substituted heteroaryl.
- 9. (Currently Amended): A component or device according to claim 1, wherein  $R^1$  to  $R^4$  are each independently selected from  $C_1$ - $C_{20}$ -alkyl or  $C_1$ - $C_{20}$ -fluoroalkyl.
- 10. (Currently Amended): A component or device according to claim 1, wherein X is mono-, bi- or tricyclic arylene or heteroarylene with up to 25 C atoms, wherein the rings can be fused, and in which the heteroaromatic groups contain at least one hetero ring atom, and wherein said arylene and heteroarylene groups are optionally substituted with one or more of F, Cl, Br, I, CN, and straight chain, branched or cyclic alkyl having 1 to 20 C atoms, which is unsubstituted, mono- or poly-substituted by F, Cl, Br, I, -CN or -OH, and in which one or more non-adjacent CH₂ groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR<sup>0</sup>-, -SiR<sup>0</sup>R<sup>00</sup>-, -CO-, -COO-, OCO-, -OCO-O, -S-CO-, -CO-S-,-CH=CH- or -C≡C- in such a manner that O and/or S atoms are not linked directly to one another.
- 11. (Currently Amended): A component or device according to claim 1, wherein X is selected from formulae IIa-IIn and their mirror images

ΙΙb

IIc

IId

IIe

IIf

IIg

IIh

wherein

- R is in each case independently H, halogen, optionally substituted alkyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl, or P-Sp-,
- r is 0, 1, 2, 3 or 4,
- s is 0, 1, 2 or 3, and
- t is 0, 1 or 2.

12. (Currently Amended): A component or device according to claim 2, wherein  $Ar(R^1R^2)$  is selected from formulae IIIa - IIIe and their mirror images

wherein

R' is in each case independently of each other H, halogen, optionally substituted alkyl,

optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl, or P-Sp-.

13. (Currently Amended): A mono-, oligo- or polymer of formula Ia - Ic

wherein

X is  $-CX^1=CX^2$ -, -C=C-, optionally substituted arylene, <u>or</u> optionally substituted <del>or</del> heteroarylene,

X<sup>1</sup> and X<sup>2</sup> are independently of each other H, F, Cl or CN,

- $R^1$   $R^4$  are independently of each other halogen, optionally substituted alkyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl, or P-Sp-,
- P is a polymerisable or reactive group,

Sp is a spacer group or a single bond, and

n is an integer  $\geq 1$ , and

Ar is arylene or heteroarylene,

## with the provisos that

- a) if X or Ar is unsubstituted thiophene-2,5-diyl, then at least one of R<sup>1-4</sup> is alkyl that is mono- or polysubstituted by F, Cl, Br, I or CN, cycloalkyl that is mono- or polysubstituted by F, Cl, Br, I or CN, optionally substituted aryl, optionally substituted heteroaryl, or P-Sp-, and
- b) X and Ar(R<sup>1</sup>R<sup>2</sup>) are different from dithienothiophene, 1,4-phenylene, 2,5-dialkyl- or 2,5-dialkoxy-1,4-phenylene, furan-2,5-diyl, 1-alkyl-1H-pyrrol-2,5-diyl, 9H-fluorene-2,7-diyl, 9,9-dialkyl-9H-fluorene-2,7-diyl, N-alkyl-9H-carbazole-2,7-diyl and anthracene-9,10-diyl, and
- c) Ar(R<sup>1</sup>R<sup>2</sup>) is different from 2,5-dialkyl- or 2,5-dialkoxy-1,4-phenylene, naphthalene-2,6-diyl, naphthalene-4,8-diyl that is substituted in 1-, 4-, 5- and/or 8-position with alkoxy, dimethylsiloxane or oxymethyloxirane groups, 9,9-dialkyl-9H-fluorene-2,7-diyl and N-alkyl-9H-carbazole-2,7-diyl.
- 14. (Currently Amended): A polymerisable liquid crystal material comprising one or more mono-, oligo- or polymers of <u>formula fomula</u> I wherein at least one of the mono-, oligo- and polymers of <u>formula fomula</u> I comprises at least one polymerisable group, and optionally comprising one or more further polymerisable compounds, wherein said at least one of the mono-, oligo- and polymers of <u>formula fomula</u> I and/or said one or more further polymerisable compounds is mesogenic or liquid crystalline,

## wherein

- X is  $-CX^1=CX^2$ -, -C=C-, optionally substituted arylene, optionally substituted or heteroarylene,
- $X^1$  and  $X^2$  are independently of each other H, F, Cl or CN,
- R<sup>1</sup> R<sup>4</sup> are independently of each other H, halogen, optionally substituted alkyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl, or P-Sp-,
- P is a polymerisable or reactive group,
- Sp is a spacer group or a single bond, and
- n is an integer  $\geq 1$ ,

with the proviso that, if X is unsubstituted thiophene-2,5-diyl and  $R^1$  and  $R^2$  are H, then at least one of  $R^3$  and  $R^4$  is selected from alkyl that is mono-or polysubstituted by F, Cl, Br, I or CN, cycloalkyl that is mono-or polysubstituted by F, Cl, Br, I or CN, optionally substituted aryl, optionally substituted heteroaryl, and P-Sp-.

- 15. (Original) Anisotropic polymer film with charge transport properties obtainable from a polymerisable liquid crystal material according to claim 14 that is aligned in its liquid crystal phase into macroscopically uniform orientation and polymerised or crosslinked to fix the oriented state.
- 16. (Original) A side chain liquid crystal polymer obtained by polymerisation of one or more mono- or oligomers or a polymerisable material as defined in claim 14, or by grafting one or more mono- or oligomers or a polymerisable material as defined in claim 14 to a polymer backbone in a polymeranaloguous reaction, optionally with one or more additional mesogenic or non-mesogenic comonomers.

- 17. (Currently Amended): In <u>a</u> an optical, electrooptical or electronic devices, field effect transistors (FET) <u>or</u> [[,]] thin film transistor (TFT), radio frequency identification (RFID) tag, a semiconducting component for organic light emitting diode (OLED) applications, a charge transport or electroluminescent layer in an electroluminescent displays, or a backlight of a liquid crystal display, containing semiconductor or charge transport material, the improvement wherein said material contains a polymerisable material according to claim 14.
- 18. (Original) In <u>a an optical</u>, electrooptical or electronic devices, field effect transistors (FET) <u>or</u> [[,]] thin film transistor (TFT), <u>radio frequency identification (RFID) tag</u>, a semiconducting component for organic light emitting diode (OLED) applications, a charge transport or electroluminescent layer in an electroluminescent displays, or a backlight of a liquid crystal display, containing semiconductor or charge transport material, the improvement wherein said material contains a mono-, oligo- or polymer according to claim 13.
  - 19. (Cancelled):
- 20. (Original) In a battery containing electrode material, the improvement wherein said material contains a mono-, oligo- or polymer according to claim 13.
- 21. (Original) In a battery containing electrode material, the improvement wherein said material contains a mono-, oligo- or polymer according to claim 13.
- 22. (Original) In a photoconductor, the improvement wherein said photoconductor contains a mono-, oligo- or polymer according to claim 13.
- 23. (Currently Amended) In a method of electrophotographic recording, the improvement wherein a mono-, oligo- or polymer according to claim 13 is employed as <u>electrophotographic</u> <u>electrophotographic</u> material.
- 24. (Currently Amended) A <del>component or device</del> according to claim 1, wherein said device is <u>a</u> an optical, electrooptical or electronic device, field effect transistors (FET), integrated circuit (IC), TFT or OLED.

- 25. (Currently Amended) A component or device according to claim 1, wherein said device is a thin film transistor TFT or a thin film transistor TFT array for flat panel displays, a radio frequency identification (RFID) tag, an electroluminescent display or backlight.
- 26. (Currently Amended) In a security marking or device comprising a FET or an RFID tag, the improvement wherein said FET or RFID tag is according to claim 24 25.
- 27. (Currently Amended) A mono-, oligo- and polymer, material or polymer as defined in claim 13 4, which is oxidatively or reductively doped to form conducting ionic species.
- 28. (Previously Presented) In a charge injection layer, planarising layer, antistatic film or conducting substrate or pattern for electronic applications or flat panel displays, the improvement wherein said layer, film, substrate, pattern or display contains a mono-, oligo- or polymer, material or polymer according to claim 27.
- 29. (Previously Presented) A component or device according to claim 1, wherein X is 1,4-phenylene,  $R^1$  and  $R^2$  are each H, and  $R^3$  and  $R^4$  are each n-hexyl.
- 30. (Previously Presented) A component or device according to claim 29, wherein n is 20-1,000.
- 31. (New): A device according to claim 4, wherein said mono-, oligo- or polymer is of formula I1a and X is  $-CX^1=CX^2$ -,  $-C\equiv C$ -, or optionally substituted heteroarylene.
- 32. (New): A device according to claim 4, wherein said mono-, oligo- or polymer is of formula I1b and X is  $-CX^1=CX^2$ -,  $-C\equiv C$ -, or optionally substituted heteroarylene.
- 33. (New): A device according to claim 4, wherein  $R^5$  to  $R^6$  are independently of each other H, halogen,  $B(OR^7)(OR^8)$ ,  $SnR^9R^{10}R^{11}$ , optionally substituted aryl, optionally substituted heteroaryl, P-Sp-, or straight chain, branched or cyclic alkyl with 1 to 20 C-atoms, which monoor polysubstituted by F, Cl, Br, I or CN, and wherein one or more non-adjacent  $CH_2$  groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR<sup>0</sup>-, -SiR<sup>0</sup>R<sup>00</sup>-, -CO-, -COO-, -OCO-O-, -SO<sub>2</sub>-, -S-CO-, -CO-S-, -CH=CH- or -C=C- in such a

manner that O and/or S atoms are not linked directly to one another.

- 34. (New): A device according to claim 4, wherein R<sup>5</sup> to R<sup>6</sup> are independently of each other H, halogen, B(OR<sup>7</sup>)(OR<sup>8</sup>), SnR<sup>9</sup>R<sup>10</sup>R<sup>11</sup>, optionally substituted aryl, optionally substituted heteroaryl, P-Sp-, or straight chain, branched or cyclic alkyl with 1 to 20 C-atoms wherein one or more non-adjacent CH<sub>2</sub> groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR<sup>0</sup>-, -SiR<sup>0</sup>R<sup>00</sup>-, -CO-, -COO-, -OCO-O-, -SO<sub>2</sub>-, -S-CO-, -CO-S-, -CH=CH- or -C≡C- in such a manner that O and/or S atoms are not linked directly to one another and which is unsubstituted or mono- or polysubstituted by F, Cl, Br, I or CN.
- 35. (New): A mono-, oligo- or polymer according to claim 13, wherein said mono-, oligo- or polymer is of formula Ia or Ib and X is  $-CX^1=CX^2$ -,  $-C\equiv C$ -, or optionally substituted heteroarylene.
- 36. (New): A mono-, oligo- or polymer according to claim 13, wherein said mono-, oligo- or polymer is of formula Ia and at least one of R<sup>3</sup> and R<sup>4</sup> is halogen, optionally substituted alkyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl, or P-Sp-.
- 37. (New): A mono-, oligo- or polymer according to claim 1, wherein said mono-, oligo- or polymer is of formula Ib and at least one of R<sup>1</sup> and R<sup>2</sup> is halogen, optionally substituted alkyl, optionally substituted cycloalkyl, optionally substituted aryl, optionally substituted heteroaryl, or P-Sp-.
- 38. (New): A mono-, oligo- or polymer according to claim 1, wherein said mono-, oligo- or polymer is of formula Ic.